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Office of the Director

February 28, 1979

Senator Dennis O'Connor
Chairman, Senate Committee
on Judiciary
State Capitol, Room 203
Honolulu, Hawaii 19813

Dear Senator O'Connor:

Regarding SB 685 and SB 687

At the 22 February hearing of the Economic Development Committee rights, I presented an Environmental Center statement on SB 685 and SB 687 relating to solar rights that led to considerable discussion. We expressed the opinion that there was reason to establish intended in SB 685. We also considered, however, that there had to be some reasonable limitations on solar rights. It is with respect to importance of such limitations, their most useful placement, and their possible framing that I am adding this additional commentary. I have not consulted with the co-authors of the Center's statement on SB 685 and SB 687 in preparing this letter, but will send them copies so that they may get in touch with you if they have any differing or additional ideas.

It does not seem to me wise that the State establish limitations to solar easements. These will generally be bilateral agreements between the owner of the property to which the easement applies and the owner of the property benefited by the easement. It seems to me that the owners of the properties should look after their own respective interests and not limited by law as to their expression in the easement.

SB 687 would not only provide a base for solar easements but allow the counties to require such easements in new subdivisions. Even here, State limitation does not seem needed, because the counties and the subdividers can work out appropriate limitations case by case.

The situation seems to me to be quite different, however, with a broad solar right such as that which would be provided in SB 685. Unless the State legislation provides limitations, or authorizes the provision of limitations by a state agency or by the counties, the right cannot be limited by anyone other than the courts. Might not the courts consider legislation without limitations so vague that they would throw it out?

The question of the best placement of responsibility for identifying the limitations deserves more discussion. For simplicity, I will refer only to simple spacial limitations as examples in the present discussion. There would, I think, be similar complexities associated with solar collector orientation.

There is no question in my mind that the actual effect of any legal limitation on solar rights must be determined on a case-by-case basis, because the effect might or should vary with:

- 1) Range of spherical angles of the sun's rays in which transmission of solar radiation is to be protected by right.
- 2) Nature, use, placement, and orientation of surfaces whose receipt of solar radiation is to be protected by right.
- 3) Topography of area around surfaces whose receipt of solar radiation is to be protected to the skyline as it might be modified by structures under applicable zoning .
- 4) Land-use regulation of area around surfaces whose receipt of solar radiation is to be protected as it may allow construction that will alter the skyline.

Although the effects of legal limitations will have to be determined case by case, the legal limitations themselves should not be determined case by case because that would lead to inconsistencies. The factors entering into case-by-case determination of the effects of the limitations suggest the areas in which standardization of the limitations themselves is necessary or at least desirable.

- 1) Minimum vertical angle as measured from skyline serving as lower bound to solar angles to which the right pertains.
- 2) With respect to the surfaces whose receipt of sunlight is by right:
 - a) Possible limitation by type (i.e. solar collectors only, those plus walls, windows, and other openings of buildings, or all those plus vegetation).
 - b) Minimum elevation above ground.
 - c) Minimum distance from property line.
 - d) Possible limitation as to orientation (i.e., for collectors, flat-plate vs. tracking).
- 3) Minimum vertical angle as measured from skyline, or minimum height above ground surface at skyline.
- 4) Limitations related to whatever rights or privileges pertaining to construction of buildings or growth of vegetation are implied by zoning tolerances, especially
 - a) in immediate vicinity, but also
 - b) to whatever distance the structures or vegetation would intercept the skyline.

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Now as to the extent to which it is the State or the counties that determine what the limitations should be:

Clearly the counties cannot be left out. Zoning is a county matter, and the several counties have adopted somewhat different zoning classifications. Hence, it would be difficult for the State to establish any limitations based on zoning except in general terms. However, major land use districting is a function of the State. It would not be difficult for the counties, under State legislature authorization to establish limitations based on the State's land use districts, but for the sake of uniformity as related to the Conservation and Agricultural Districts, at least, over which the State has predominant control of land use in detail, wouldn't State imposed limitations be better?

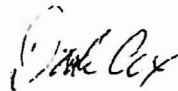
Similar argument can be made with respect in the other kinds of limitations. The counties have a better grasp of detail and the State has responsibilities for generalities and desirable uniformity.

My conclusion at the moment is that what would be best would be a State set of guidelines as to the limitations, maximum permissible limitations, minimum permissible limitations, or permissible ranges to limitation, within which the counties would have the freedom of choice.

There is another angle to the question of solar rights that one of the participants in the 22 February hearing brought to my attention through a whispered conversation. What about the right for protection from unwarranted reflections of solar radiation, for example, off a building with reflecting walls. This introduces a reverse twist of at least equal complexity.

I'm afraid proper definitions of limitations would take much longer to work out than the time available before SB 685 must be acted on by the Senate, but the solar rights question is too important to allow it to drop just because it cannot be appropriately defined in this session.

Yours very truly,



Doak C. Cox
Director

DCC/ck

cc: Robert Kamins
James Chou

P.S. I did not know until you told me, but was pleased to learn, that you have had Julian Gresser working on the solar rights problem. His knowledge of the Japanese experience is invaluable. Unfortunately, as I learned from him about a week ago, he was just leaving for a year and a half.